09/770984

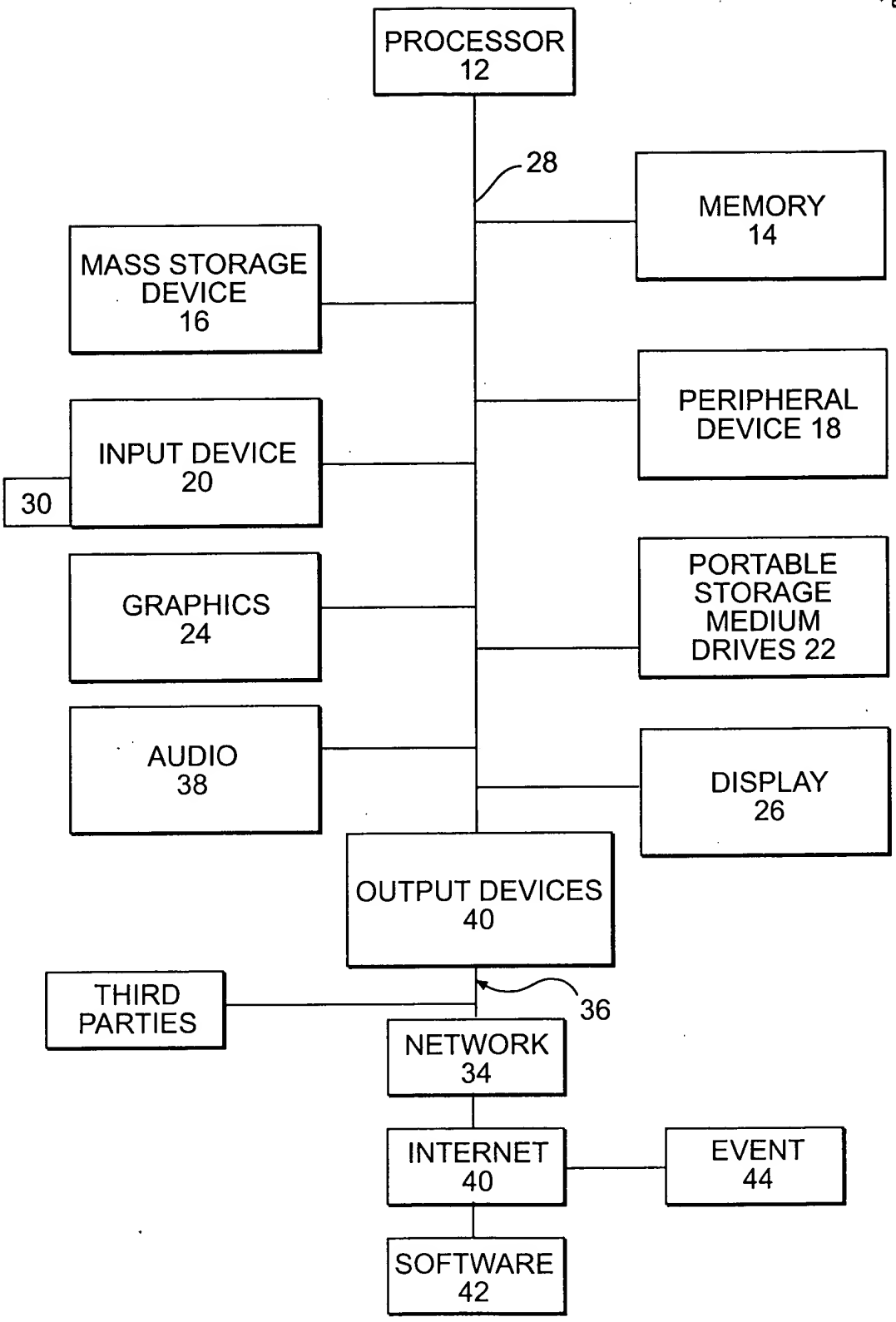

FIG. 1

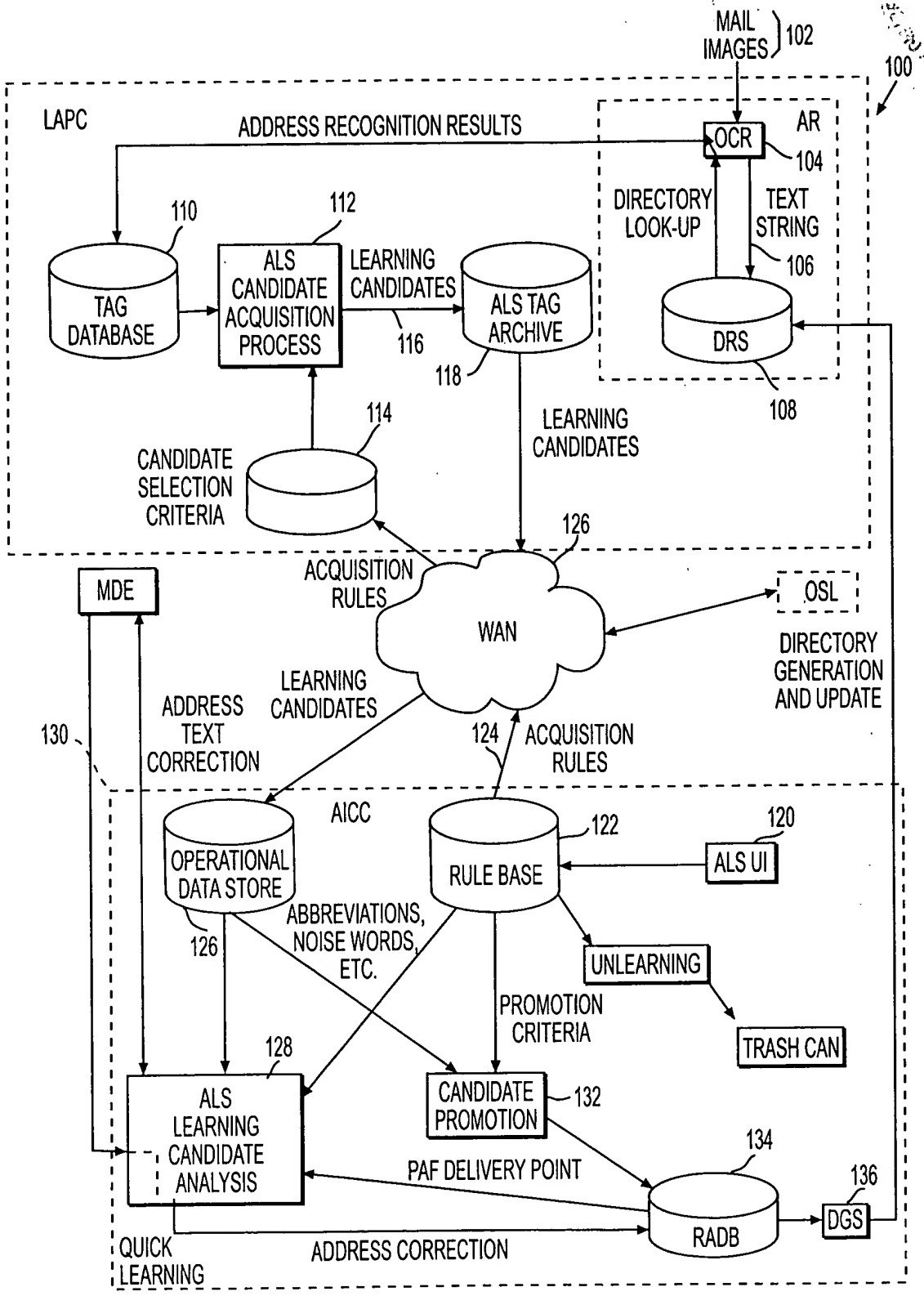
MAIL IMAGES
102
100
LAPC
ADDRESS RECOGNITION RESULTS
OCR
AR
104
DIRECTORY LOOK-UP
TEXT STRING
106
110
112
TAG DATABASE
ALS CANDIDATE ACQUISITION PROCESS
LEARNING CANDIDATES
ALS TAG ARCHIVE
DRS
116
118
108
114
CANDIDATE SELECTION CRITERIA
LEARNING CANDIDATES
126
MDE
ACQUISITION RULES
WAN
OSL
DIRECTORY GENERATION AND UPDATE
LEARNING CANDIDATES
ADDRESS TEXT CORRECTION
130
124
ACQUISITION RULES
AICC
OPERATIONAL DATA STORE
RULE BASE
122
120
ALS UI
ABBREVIATIONS, NOISE WORDS, ETC.
126
UNLEARNING
PROMOTION CRITERIA
TRASH CAN
128
ALS LEARNING CANDIDATE ANALYSIS
CANDIDATE PROMOTION
132
134
PAF DELIVERY POINT
136
RADB
DGS
QUICK LEARNING
ADDRESS CORRECTION

FIG. 2

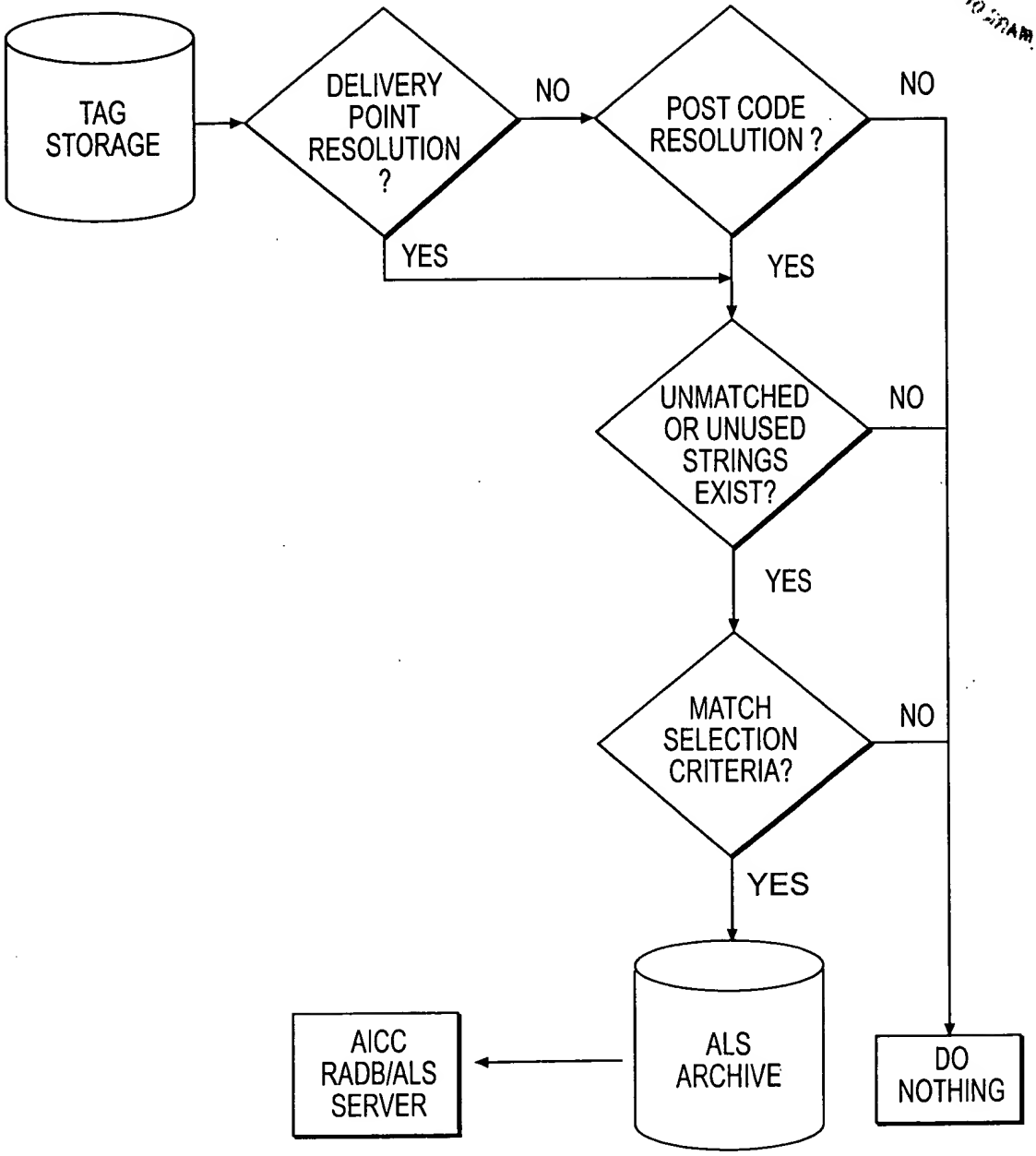
TAG STORAGE
DELIVERY POINT RESOLUTION ?
NO
POST CODE RESOLUTION ?
NO
YES
YES
UNMATCHED OR UNUSED STRINGS EXIST?
NO
YES
MATCH SELECTION CRITERIA?
NO
YES
AICC RADB/ALS SERVER
ALS ARCHIVE
DO NOTHING

FIG. 3

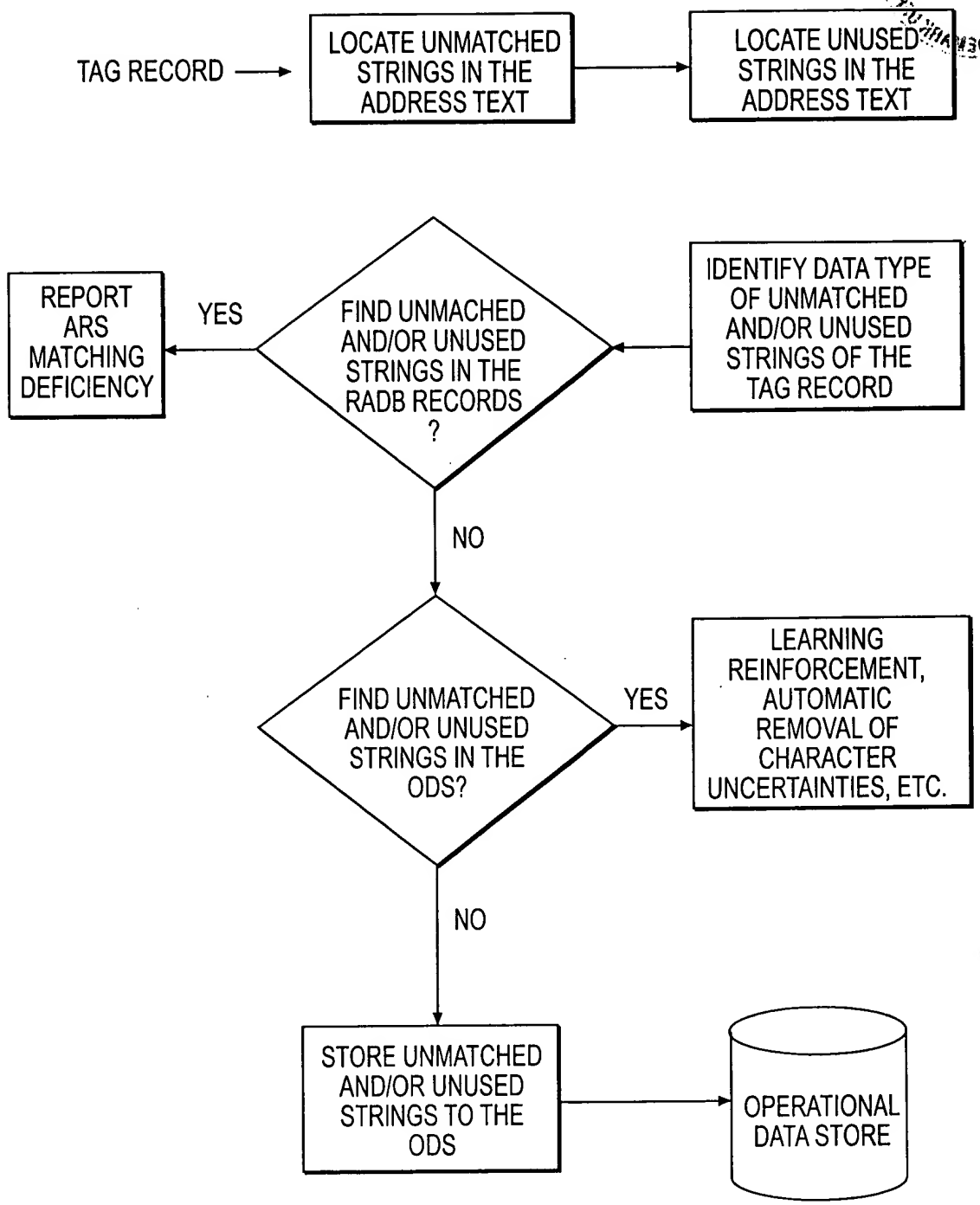
TAG RECORD
LOCATE UNMATCHED STRINGS IN THE ADDRESS TEXT
LOCATE UNUSED STRINGS IN THE ADDRESS TEXT
IDENTIFY DATA TYPE OF UNMATCHED AND/OR UNUSED STRINGS OF THE TAG RECORD
FIND UNMACHED AND/OR UNUSED STRINGS IN THE RADB RECORDS ?
YES
REPORT ARS MATCHING DEFICIENCY
NO
FIND UNMATCHED AND/OR UNUSED STRINGS IN THE ODS?
YES
LEARNING REINFORCEMENT, AUTOMATIC REMOVAL OF CHARACTER UNCERTAINTIES, ETC.
NO
STORE UNMATCHED AND/OR UNUSED STRINGS TO THE ODS
OPERATIONAL DATA STORE

FIG. 4

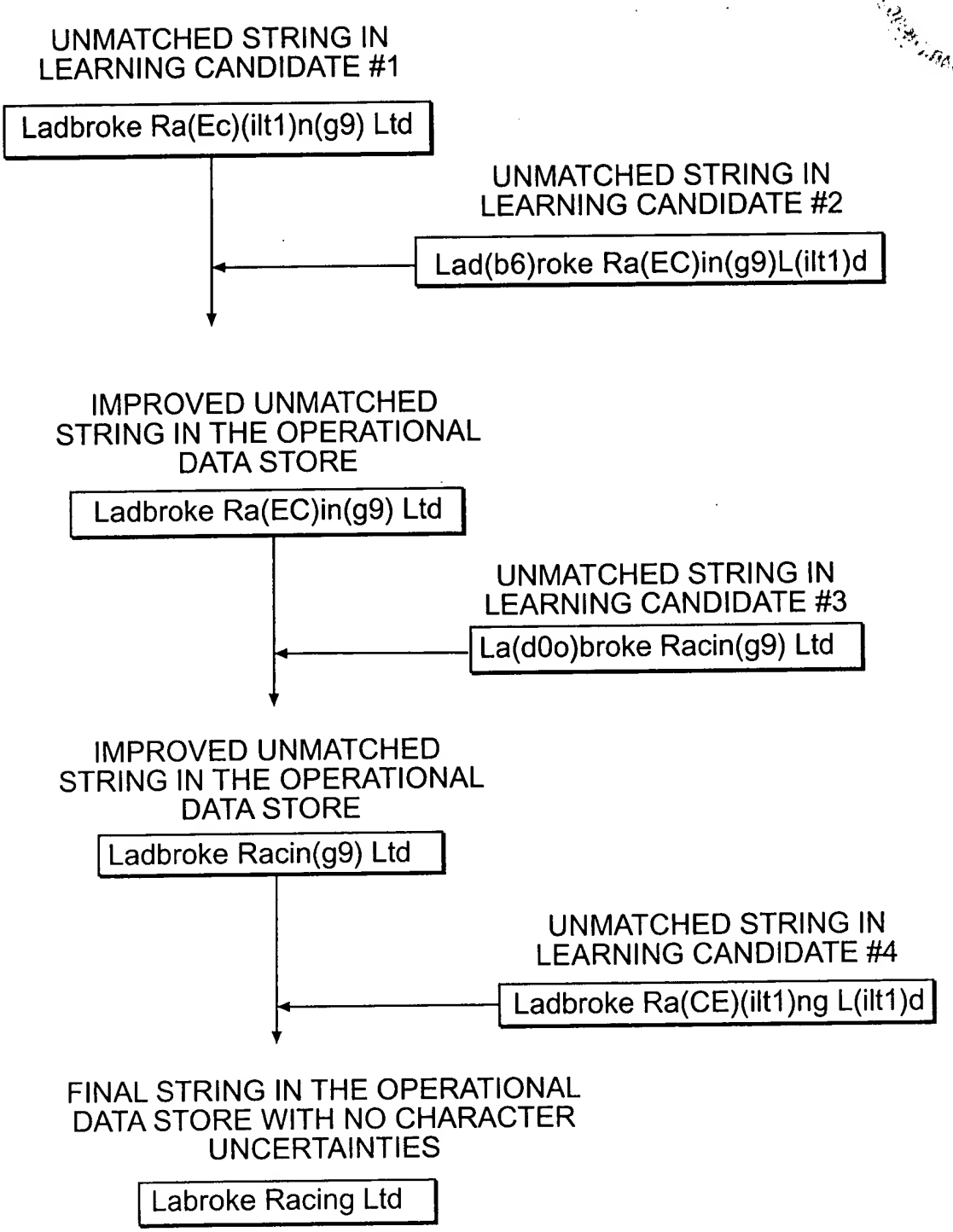
UNMATCHED STRING IN LEARNING CANDIDATE #1
Ladbroke Ra(Ec)(ilt1)n(g9) Ltd
UNMATCHED STRING IN LEARNING CANDIDATE #2
Lad(b6)roke Ra(EC)in(g9)L(ilt1)d
IMPROVED UNMATCHED STRING IN THE OPERATIONAL DATA STORE
Ladbroke Ra(EC)in(g9) Ltd
UNMATCHED STRING IN LEARNING CANDIDATE #3
La(d0o)broke Racin(g9) Ltd
IMPROVED UNMATCHED STRING IN THE OPERATIONAL DATA STORE
Ladbroke Racin(g9) Ltd
UNMATCHED STRING IN LEARNING CANDIDATE #4
Ladbroke Ra(CE)(ilt1)ng L(ilt1)d
FINAL STRING IN THE OPERATIONAL DATA STORE WITH NO CHARACTER UNCERTAINTIES
Labroke Racing Ltd

FIG. 5

RADB DATABASE DESIGN

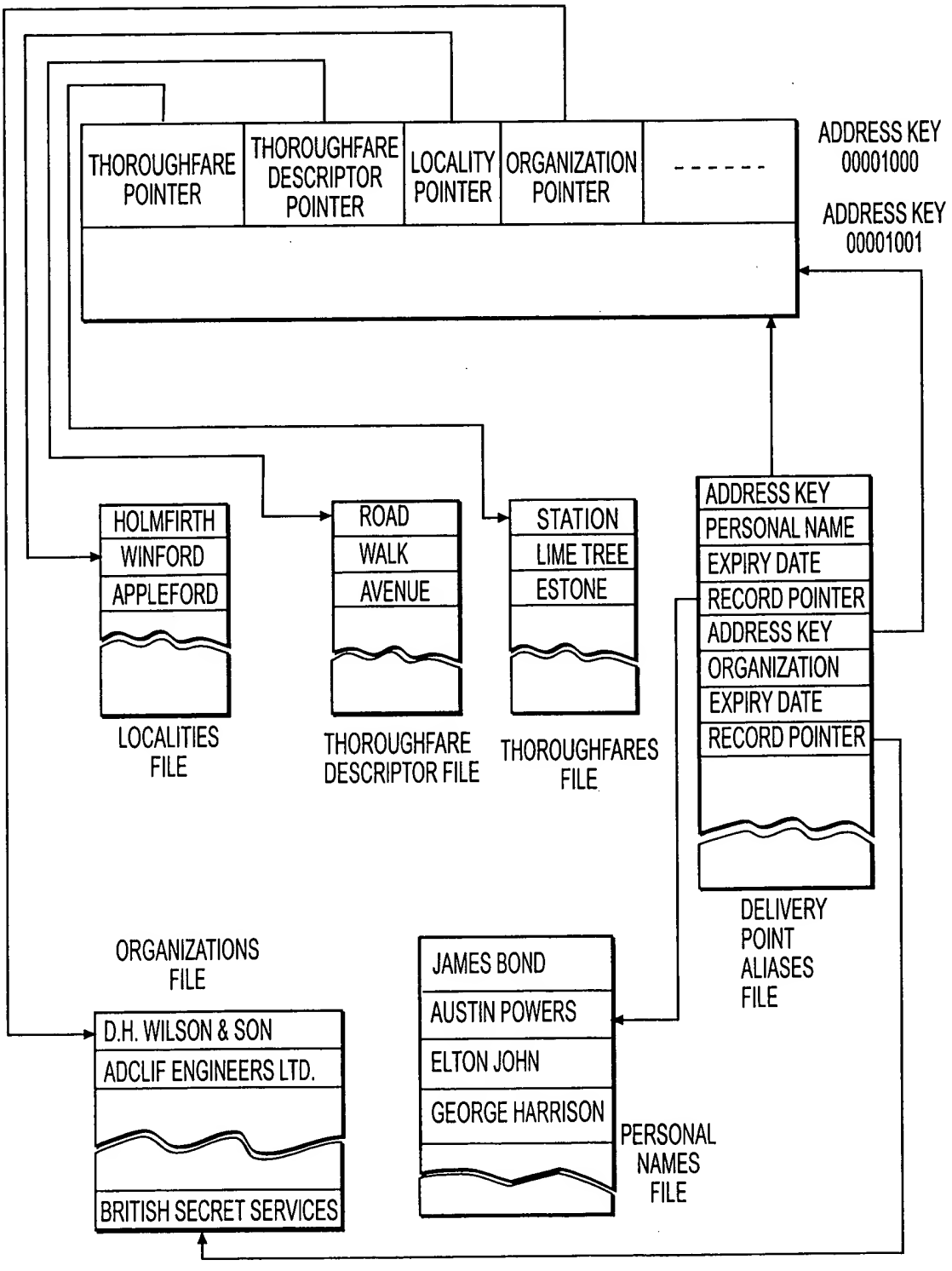

FIG. 6

T0870 "86024260

REFERENCE ADDRESS DATABASE

ADDRESS KEY	THOROUGHFARE POINTER	THOROUGHFARE DESCRIPTOR POINTER	LOCALITY POINTER	ORGANIZATION POINTER	- - - - - - -
00001000					
ADDRESS KEY 00001001					
ADDRESS KEY 00001002					

OPERATIONAL DATA STORE

UNMATCHED STRING #1	STRING TOKEN	DATA TYPE #1	DATA TYPE #1 CONFIDENCE	DATA TYPE #2	- - - - - - - - - -	FREQUENCY COUNTER	ADDRESS KEY
UNMATCHED STRING #2	STRING TOKEN	DATA TYPE #1	DATA TYPE #1 CONFIDENCE	DATA TYPE #2	- - - - - - - - - -	FREQUENCY COUNTER	ADDRESS KEY
UNMATCHED STRING #3	STRING TOKEN	DATA TYPE #1	DATA TYPE #1 CONFIDENCE	DATA TYPE #2	- - - - - - - - - -	FREQUENCY COUNTER	ADDRESS KEY
UNMATCHED STRING #4	STRING TOKEN	DATA TYPE #1	DATA TYPE #1 CONFIDENCE	DATA TYPE #2	- - - - - - - - - -	FREQUENCY COUNTER	ADDRESS KEY
UNMATCHED STRING #N	STRING TOKEN	DATA TYPE #1	DATA TYPE #1 CONFIDENCE	DATA TYPE #2	- - - - - - - - -	FREQUENCY COUNTER	ADDRESS KEY

FIG. 7

PATENT & TRADEMARK OFFICE